

HOUSING UNIT ESTIMATES FOR HAWAII,
1970-1988

The number of housing units in Hawaii as of April 1, 1988 was 385,290, according to estimates prepared by the Hawaii State Department of Business and Economic Development. The 1988 estimate indicated increases of 2.0 percent since April 1987 and 15.3 percent since the 1980 census. The net change over the past year amounted to 7,392 units, or about the same increase as in the preceding year.

Although there was little change in the proportion of units occupied by their owners, fee-simple ownership of land continued to gain at the expense of leasehold housing. Overall, the number of owner-occupied units increased 2.0 percent during 1987-1988 and 16.5 percent since 1980, compared with increases of 1.9 percent and 14.4 percent for renter-occupied or vacant units. Units on land owned in fee simple, however, rose by 26.0 percent during the eight-year postcensal period, while those on leased land decreased by 9.2 percent. By 1988, 41.6 percent of the total housing stock was owner occupied, 32.8 percent on land owned in fee, and 8.7 percent on leased land.

Renter-occupied or vacant units have likewise maintained their approximate 1980 share of the total, although with greater growth in the private inventory than among the units owned or operated by government agencies. Privately owned rental units increased by 16.2 percent between 1980 and 1988, and accounted for 51.6 percent of the Statewide inventory at the end of that period. Governmental housing (mostly operated by the armed forces) gained 2.5 percent during those eight years and made up 6.9 percent of the 1988 stock.

Growth on the Neighbor Islands far exceeded that reported for Oahu. Although the City and County of Honolulu still had most of the housing in the State in 1988--fully 276,509 units, or 71.8 percent of the total--its growth came to only 1.3 percent during the past year and 9.7 percent for 1980-1988, well below the corresponding increases for the other three counties: 3.6 and 30.6 for the Big Island, 4.3 and 34.5 for Maui, and 2.9 and 31.3 for Kauai.

These estimates of total housing stock include condominium units in rental pools for transient occupancy. Such housing, not normally available for resident use, numbered 21,120 units in 1988, or 81.5 percent above the 1980 figure. Resident units, in contrast, increased by only 12.9 percent in that eight-year period.

Although current estimates of the vacancy rate are unavailable, some indication of vacancies can be obtained from the most recent household estimates published by the Bureau of the Census. The Statewide household total as of July 1, 1987 was approximately 345,000, compared with an April 1, 1987 housing inventory of 356,002 resident units. These estimates were prepared by different methods and may not be entirely

comparable. Even so, they suggest an extremely tight housing situation. Between 1980 and 1987, increases amounted to 17.3 percent for households but only 10.4 percent for the number of resident units. During the same period, the resident population increased by 12.2 percent. The higher growth rate for households resulted from a concomitant decline in average household size, from 3.15 in 1980 to 3.02 in 1987. Residential construction has clearly failed to keep pace with household formation.

The shift in homeownership, from units on leased land to those on land owned in fee simple, in part reflects the conversion of lots under the provisions of the State Land Reform Act of 1967. During fiscal 1987, a total of 2,333 lots were involved in negotiated settlements.

The low Statewide homeownership rate--in 1980, Hawaii ranked second-lowest among the 50 States and District of Columbia--stems in large measure from the high cost of housing in the Islands. In the first three months of 1988, the Honolulu Metropolitan Statistical Area (Oahu) reported a median price of \$198,400 for existing single-family homes, by a wide margin the highest of any such area in the United States.

Definitions and Methodology

The estimates reported here were based on the 1970 and 1980 censuses of housing, annual building permit data from county building departments, and information supplied by government agencies providing housing, chiefly the armed forces and Hawaii Housing Authority. The annual estimates for 1971-1979 have been revised to make them consistent with results of the 1980 census. 1/

The U.S. Bureau of the Census has defined a housing unit as a house, an apartment, a group of rooms, or a single room occupied as separate living quarters or, if vacant, intended for occupancy. Separate living quarters are those in which the occupants live and eat separately from other persons in the building and have direct access from the outside of the building or through a common hall. The occupants may be a single family, one person living alone, two or more families living together, or any other group of related or unrelated persons who share living arrangements. Both occupied and vacant housing units are included in the housing inventory except that tents, boats, vans, and the like are included only if they are occupied. Condominium units are included even if occupied by tourist or other nonresidents, but regular hotel units are generally counted only if occupied by persons who consider such units their usual place of residence.

Annual changes in the stock of private housing were estimated from building and demolition permit figures supplied by county building departments, as lagged to reflect the average interval between issuance of permit and completion of construction or razing, and transfers to or from government ownership. It was assumed that nine months elapsed, on the

average, between the authorization and completion dates of a structure with three or more housing units. For one- or two-unit structures and all demolitions, a three-month lag was assumed. Although these lags may be unrealistically short for the large single-family subdivisions and high-rise apartment structures that made up a large part of the construction boom early in the 1970s, lengthening them would have a relatively modest effect on the annual totals for the housing inventory. The annual changes in government housing units were obtained from the agencies in charge of such units and reflected actual (rather than assumed) completion dates. These data on the reported components of change in the private and public inventory indicated a Statewide net intercensal (1970-1980) increase of 119,779 housing units, compared with an actual growth (as shown by the census) of 117,477. To assure consistency with the census results, the annual data on net change by counties for 1971-1979 were adjusted by the ratios of actual to reported change. These adjustment factors ranged from 0.849 (for Kauai) to 1.015 (for Maui County). No adjustment factors were applied to data after 1980. It should be noted that annual counts of the standing government inventory indicated a 12-month, 1987-1988 net increase of 103 units while data submitted on the components of change added to a net gain of 133 units.

Detailed statistics appear in the following tables. Table 1 presents annual estimates of the total housing inventory, 1970-1987, corresponding data from the Hawaii State Department of Taxation and Honolulu Department of Finance on owner-occupied units, and data from government agencies on units under public jurisdiction. Annual intercensal and postcensal estimates of total units by counties appear in table 2. Table 3 contains figures from the Hawaii Visitors Bureau on condominium units in rental pools for transient use, and also on the remainder of the housing stock by counties. Estimates for recent years, by tenure and control by county, are given in table 4. Table 5 presents building permit statistics by counties, and table 6 contains data on the components of change in the inventory. Government units are listed in table 7. Table 8 compares housing trends, 1980-1987, with corresponding trends in population and households.

Intercensal estimates for the years before 1970 have been calculated by the Honolulu Redevelopment Agency and cited in Historical Statistics of Hawaii. 2/

The present estimates were made as part of an annual review of changes in the housing supply in Hawaii, initiated early in 1954 and extended at that time back to 1940. In the past decade, these estimates have been prepared by the Hawaii State Department of Business and Economic Development, primarily from data provided by the armed forces; County building departments; Hawaii Housing Authority; and other Federal, State and County agencies. The assistance of these agencies is gratefully acknowledged.

1/ For further information on the 1971-1979 estimates, see DPED Statistical Report 156, Housing Unit Estimates for Hawaii, 1970-1982 (July 28, 1982).

2/ Honolulu Redevelopment Agency, "Inter-censal Estimates of Dwelling Units, 1940-1960," Redevelopment and Housing Research, No. 24, July 1964, pp. 23-31, and "Intercensal Estimates of Housing Units, 1960-1970," Redevelopment and Housing Research, No. 31, July 1971, pp. 13-17; Robert C. Schmitt, Historical Statistics of Hawaii (The University Press of Hawaii, 1977), tables 15.5 and 15.7.

Table 1
TENURE AND CONTROL OF HOUSING: 1970 TO 1988
[Condominium units occupied or intended for occupancy by
nonresidents
are included in these estimates]
Owner-occupied
units 2/ Renter-occupied and vacant units

Year	All housing units 1/	Land owned	Land leased	Private 3/	Federal 4/	State and County 4/
1970.....	216,774	68,422	20,802	106,821	14,439	6,290
1971.....	228,749	72,086	21,732	113,531	15,089	6,311
1972.....	238,770	75,939	24,565	117,111	14,959	6,196
1973.....	250,742	78,878	26,776	123,934	15,071	6,083
1974.....	266,828	82,494	30,333	131,368	16,373	6,260
1975.....	284,120	85,264	30,543	145,276	16,386	6,651
1976.....	298,339	88,284	33,730	152,578	17,225	6,522
1977.....	306,989	89,980	34,549	158,223	17,493	6,744
1978.....	315,513	92,989	35,869	161,728	18,653	6,274
1979.....	324,261	96,273	36,540	165,045	19,022	7,381
1980.....	334,235	100,478	36,986	170,963	19,437	6,371
1981.....	342,873	104,677	37,413	174,753	19,427	6,603
1982.....	348,980	106,147	37,372	179,579	19,392	6,490
1983.....	353,414	108,761	35,586	183,249	19,304	6,514
1984.....	359,107	111,767	35,545	185,657	19,294	6,844
1985.....	364,436	114,548	35,681	187,905	19,280	7,022
1986.....	370,548	117,090	35,811	191,475	19,264	6,908
1987 5/...	377,898	121,019	35,959	194,582	19,265	7,073
1988.....	385,290	126,563	33,579	198,707	19,394	7,047

1/ As of April 1.

2/ As indicated by the number of taxpayers claiming home exemptions. The number of owner-occupied housing units reported by the U.S. Census of Housing is somewhat higher than the corresponding number based on taxpayer home exemptions, chiefly because of differences in definitions. Data for 1977 and later years refer to January 1; data for 1970-1976, to July 1.

3/ Calculated as a residual after accounting for the known components, some of which pertain to dates other than April 1, and thus not attributable to any specific date.

4/ As of April 1. Data include housing units leased from private owners.

5/ Revised.

Source: Present report.

Table 2
HOUSING UNITS STANDING, BY COUNTIES:
1970 TO 1988

[As of April 1. Condominium units occupied or intended for occupancy by nonresidents are included in these estimates]

Year	State total	City and County of Honolulu	Total	Other counties		
				Hawaii	Kauai	Maui
1970.....	216,774	174,742	42,032	18,972	9,021	14,039
1971.....	228,749	184,101	44,648	20,061	9,298	15,289
1972.....	238,770	190,973	47,797	21,648	9,555	16,594
1973.....	250,742	198,970	51,772	23,578	10,092	18,102
1974.....	266,828	210,940	55,888	25,282	10,700	19,906
1975.....	284,120	223,647	60,473	26,694	11,347	22,432
1976.....	298,339	232,669	65,670	28,131	11,934	25,605
1977.....	306,989	237,571	69,418	29,453	12,433	27,532
1978.....	315,513	243,103	72,410	30,579	12,841	28,990
1979.....	324,261	247,465	76,796	32,283	13,610	30,903
1980.....	334,235	252,038	82,197	34,215	14,828	33,154
1981.....	342,873	254,969	87,904	36,180	16,314	35,410
1982.....	348,980	256,967	92,013	37,738	17,081	37,194
1983.....	353,414	259,574	93,840	38,702	16,937	38,201
1984.....	359,107	262,902	96,205	39,762	17,539	38,904
1985.....	364,436	266,127	98,309	40,820	17,979	39,510
1986.....	370,548	269,390	101,158	41,944	18,446	40,768
1987 1/.....	377,898	273,054	104,844	43,135	18,929	42,780
1988.....	385,290	276,509	108,781	44,700	19,476	44,605

1/ Revised.

Source: Present report.

Table 3
RESIDENT AND NONRESIDENT HOUSING UNITS, BY COUNTIES: 1977 TO
1988

Category and year	State total	City & County of Honolulu	Total	Other counties		
				Hawaii	Kauai	Maui
RESIDENT 1/						
1977.....	301,904	237,059	64,845	29,123	11,843	23,879
1978.....	308,444	241,573	66,871	30,008	12,062	24,801
1979.....	315,728	245,101	70,627	31,548	12,623	26,456
1980.....	322,598	247,152	75,446	33,594	13,395	28,457
1981.....	328,679	249,330	79,349	34,921	14,458	29,970
1982.....	334,580	251,280	83,300	36,254	15,402	31,644
1983.....	340,001	254,827	85,174	36,933	15,931	32,310
1984.....	341,505	256,015	85,490	37,860	15,941	31,689
1985.....	342,632	257,111	85,521	38,541	15,903	31,077
1986.....	347,549	259,552	87,997	39,892	15,872	32,233
1987 2/....	356,002	263,818	92,184	41,033	16,298	34,853
1988.....	364,170	268,874	95,296	42,346	16,621	36,329
NONRESIDENT 3/						
1977.....	5,085	512	4,573	330	590	3,653
1978.....	7,069	1,530	5,539	571	779	4,189
1979.....	8,533	2,364	6,169	735	987	4,447
1980.....	11,637	4,886	6,751	621	1,433	4,697
1981.....	14,194	5,639	8,555	1,259	1,856	5,440
1982.....	14,400	5,687	8,713	1,484	1,679	5,550
1983.....	13,413	4,747	8,666	1,769	1,006	5,891
1984.....	17,602	6,887	10,715	1,902	1,598	7,215
1985.....	21,804	9,016	12,788	2,279	2,076	8,433
1986.....	22,999	9,838	13,161	2,052	2,574	8,535
1987.....	21,896	9,236	12,660	2,102	2,631	7,927
1988.....	21,120	7,635	13,485	2,354	2,855	8,276

1/ Includes all housing units other than condominium units in rental pools and intended for transient occupancy.

2/ Revised.

3/ Condominium units in rental pools and intended for transient occupancy, based on February survey data from the Hawaii Visitors Bureau.

Source: Nonresident units from Hawaii Visitors Bureau, Visitor Plant Inventory, February reports, 1977-1988, resident units calculated as residual, using April 1 estimates of total units in present report, table 2.

Table 4
TENURE AND CONTROL OF HOUSING BY COUNTIES: 1986 TO 1988

[Condominium units occupied or intended for occupancy by
nonresidents are included in these
estimates]

County	All housing units 1/	Owner-occupied units 2/		Renter-occupied and vacant units 3/		State and County 1/
		Land owned	Land leased	Private 4/	Federal 1/	
1986						
State total..	370,548	117,090	35,811	191,475	19,264	6,908
City & Co. of						
Honolulu	269,390	79,929	33,644	131,529	19,134	5,154
County of Hawaii	41,944	18,210	1,200	21,528	50	956
County of Kauai	18,446	6,809	248	10,995	65	329
County of Maui.	40,768	12,142	719	27,423	15	469
1987 (revised)						
State total..	377,898	121,019	35,959	194,582	19,265	7,073
City & Co. of						
Honolulu	273,054	82,728	33,656	132,213	19,135	5,322
County of Hawaii	43,135	18,704	1,241	22,174	50	966
County of Kauai	18,929	7,002	273	11,260	65	329
County of Maui.	42,780	12,585	789	28,935	15	456
1988						
State total..	385,290	126,563	33,579	198,707	19,394	7,047
City & Co. of						
Honolulu	276,509	87,096	31,180	133,664	19,264	5,305
County of Hawaii	44,700	19,187	1,244	23,255	50	964
County of Kauai	19,476	7,237	305	11,541	66	327
County of Maui.	44,605	13,043	850	30,247	14	451

1/ As of April 1.

2/ As indicated by the number of taxpayers claiming home
exemptions, as of January 1.

3/ Data for both Federal and State agencies include housing
units leased by these agencies from private owners. All data are
as of April 1.

4/ Calculated as a residual after accounting for the known
components, some of which pertain to dates other than April 1,

Source: Present study.

Table 5
PRIVATE RESIDENTIAL CONSTRUCTION AND
DEMOLITION AUTHORIZED BY PERMITS, BY COUNTIES: 1983 TO 1987

Category & year authorized	State total	City and County of Honolulu	Total	Other counties		
				Hawaii	Kauai	Maui
New 1-family dwellings						
1983.....	3,387	1,562	1,825	880	398	547
1984.....	4,117	2,197	1,920	900	382	638
1985.....	4,663	2,313	2,350	979	387	984
1986.....	4,985	2,024	2,961	1,127	417	1,417
1987.....	5,813	2,684	3,129	1,391	543	1,195
New duplex units:						
1983.....	138	60	78	58	6	14
1984.....	146	112	34	28	4	2
1985.....	208	112	96	64	-	32
1986.....	166	112	54	18	2	34
1987.....	182	124	58	50	6	2
New apartments:						
1983.....	1,341	1,220	121	38	73	10
1984.....	1,134	942	192	153	35	4
1985.....	2,388	1,744	644	129	84	431
1986 1/.....	2,570	2,076	494	22	-	472
1987.....	1,671	785	886	314	-	572
Units demolished:						
1983 2/.....	505	385	120	54	4	62
1984.....	528	429	99	50	5	44
1985 3/.....	555	455	100	38	12	50
1986 4/.....	690	534	156	43	60	53
1987 5/.....	825	741	84	40	2	42

1/ Revised.

2/ Excludes 16 structures destroyed by volcanic activity in Hawaii County.

3/ Excludes 11 homes in Hilo destroyed by high winds, February 16, 1986.

4/ Excludes 14 structures destroyed by volcanic activity and 1 by high winds, all in Hawaii County.

5/ Excludes 18 units destroyed by volcanic activity in Hawaii County.

Source: Compiled from County building departments by the Hawaii State Department of Business and Economic Development.

Table 6
COMPONENTS OF CHANGE IN THE HOUSING INVENTORY, BY CONTROL AND
COUNTY:
APRIL 1, 1986 TO MARCH 31, 1987

[Revised]

New housing units built

County and control	In 1-unit struc- tures	In 2-unit struc- tures	In multi- unit struc- tures	Housing units con- verted 1/	Housing units demol- ished	Housing units trans- ferred 2/
State total.....	5,346	174	3,209	+98	722	-
City and County of						
Honolulu	2,246	112	1,999	+7	545	-
Private 3/.....	2,024	112	1,910	(NA)	534	-17
Armed forces.....	-	-	-	+7	6	-
HHA rental.....	-	-	-	-	-	+17
Hon. Hsg. & Comm. Dev.	222	-	89	-	5	-
Hawaii County.....	1,137	18	76	+18	58	-
Private 3/.....	1,127	18	76	+18	58	-
Office of Housing and Com. Dev..	10	-	-	-	-	-
Kauai County.....	426	2	42	+73	60	-
Private 3/.....	417	2	42	+73	60	+9
Kauai Hsg. Agency	9	-	-	-	-	9
Maui County.....	1,537	42	471	-	59	-
Private 3/.....	1,417	34	451	(NA)	53	+176
Maui Department of Human Concerns.	120	8	20	-	6	-176

NA Not available.

1/ Number added less number deleted.

2/ Net gain (+) or loss (-) by purchase, sale, donation, or lease. There were units in interagency transfers in which the receiving agency was not identified.

3/ Based on building permit data, allowing nine months for completion of units in multi-unit structures and three months for all other activity.

Source: Present study.

Table 7
COMPONENTS OF CHANGE IN THE HOUSING INVENTORY, BY CONTROL AND
COUNTY:

APRIL 1, 1987 TO MARCH 31, 1988

New housing units built

County and control	In 1-unit struc- tures	In 2-unit struc- tures	In multi- unit struc- tures	Housing units con- verted 1/	Housing units demol- ished	Housing units trans- ferred 2/
State total.....	5,900	226	2,746	+15	847	-
City and County of						
Honolulu	2,688	124	1,430	-	745	-
Private 3/.....	2,684	124	1,430	(NA)	741	-154
Armed forces.....	-	-	-	-	-	+137
Hawaii Housing						
Authority	-	-	-	-	-	+17
University of HI	4	-	-	-	4	-
Hawaii County.....	1,391	50	168	+16	58	-
Private 3/.....	1,391	50	168	+16	58	-
Kauai County.....	543	6	-	-	2	-
Private 3/.....	543	6	-	(NA)	2	+1
Housing Agency....	-	-	-	-	-	-1
Maui County.....	1,278	46	526	-1	42	-
Private 3/.....	1,195	2	522	(NA)	42	+154
Soil conservation.	-	-	-	-1	-	-
Dept. of Human Concerns	83	44	4	-	-	-154

NA Not available.

1/ Number added less number deleted.

2/ Net gain (+) or loss (-) by purchase, sale, donation, or lease. There were units in interagency transfers in which the receiving agency was not identified.

3/ Based on building permit data, allowing nine months for completion of units in multi-unit structures and three months for all other activity.

Source: Present study.

Table 8
HOUSING UNITS OWNED OR OPERATED BY GOVERNMENT AGENCIES, BY
COUNTIES:
APRIL 1, 1988

Government unit or type of housing	State total	City and County of Honolulu	Hawaii County	Kalawao County	Kauai County	Maui County
All agencies.....	26,441	24,569	1,014	116	393	349
Federal government..	19,394	19,264	50	2	66	12
Armed forces: Oahu						
Consol. Family						
Hsg. Office.....	18,965	18,962	6	-	-	-
Coast Guard.....	311	292	9	-	4	6
Navy.....	62	-	-	-	62	-
Civilian agencies:						
East-West Center.	3	3	-	-	-	-
Fish & Wildlife						
Service	5	2	3	-	-	-
National Park Service	40	-	32	2	-	6
National Weather						
Service	5	5	-	-	-	-
State government....	6,349	4,845	872	114	326	192
Corrections.....	1	1	-	-	-	-
Education.....	27	27	-	-	-	-
Hawaii Housing						
Authority: Rental	5,932	4,658	834	-	298	142
Teachers housing 1/	21	-	5	-	-	16
Health.....	175	20	18	114	5	18
Land & Natural						
Resources	97	55	9	-	22	11
Transportation.....	5	2	-	-	-	3
University of Hawaii	91	82	6	-	1	2
County government...	698	460	92	-	1	145
Teachers housing 1/	46	-	32	-	-	14
Other housing.....	652	460	60	-	1	131

1/ To avoid double-counting, teachers housing owned by the counties reported separately.

Source: Hawaii State Department of Business and Economic Development, survey of government agencies.

Table 9
HOUSING UNITS, HOUSEHOLDS, AND
RESIDENT POPULATION: 1980 TO 1987

Year	Housing units			Resident population
	Total	Resident	Households	
1980.....	334,235	322,598	294,052	964,691
1987.....	377,898	356,002	345,000	1,083,000
Percent change, 1980-1987	13.1	10.4	17.3	12.2

Source: Present report, tables 1 and 3; U.S. Bureau of the Census, "State Population and Households Estimates, with Age, Sex and Components of Change: 1981-87," Current Population Reports, Population Estimates and Projections, Series P-25, No. 1024, May 1988, pp. 11 and 82.